



Considerations When Permitting Construction Projects at Existing Facilities

MECC 2025



Introductions

Ken Gouvion, CPESC

- 14 Years of Professional Experience
- BS in Biology with an emphasis on Environmental Management MS in Biology microbial communities in wetland sediments
- Industrial/Manufacturing, Construction
- Private Consulting
 - CPESC
 - 30-hour OSHA Certification
 - 40-hour HAZWOPER
 - SWPPPs, construction compliance, inspections, constructability surveys



Objectives



Developing a Construction SWPPP for a site that has an existing Multi-sector (Industrial) Permit.



Addressing the potential for soil contamination on-site.



Waste management considerations associated with Tier II Facilities and RCRA Reporting.



Disseminating the relevant information to the contractors.



Developing a Construction SWPPP for a site with existing Multi-sector Permit

(And other relevant permitting requirements)



Stormwater Pollution Prevention Plan (SWPPP)

When developing for greenfield site, we typically consider:

- What are limits of disturbance?
- How will water flow onto, across, and off our site?
- What waterbodies are downstream of the site; how far away are the waterbodies?



Sample Google Earth image

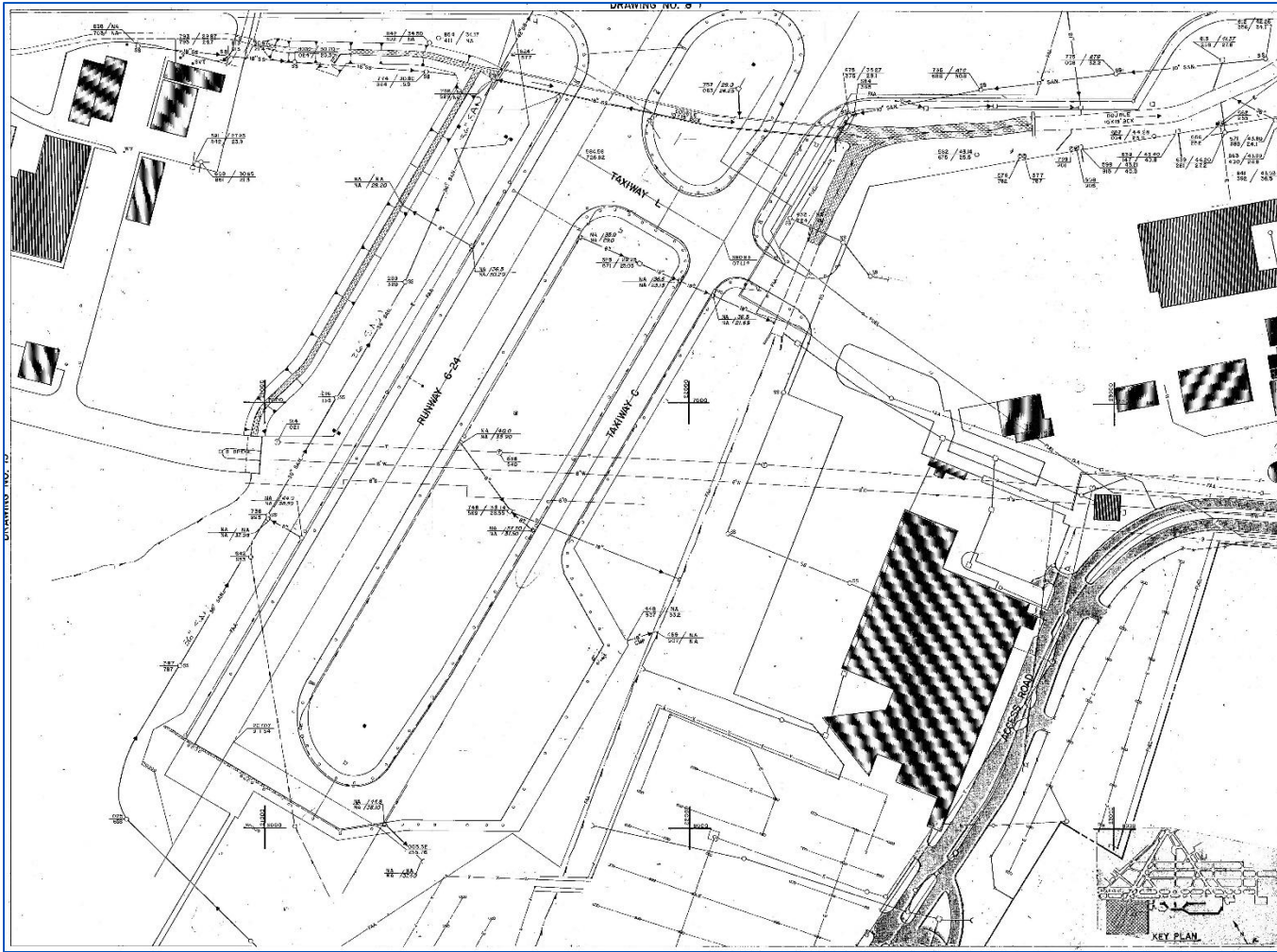
Stormwater Pollution Prevention Plan



Sample Google Earth images



Stormwater Pollution Prevention Plan



Stormwater Pollution Prevention Plan



Stormwater Pollution Prevention Plan

Beyond knowing what waterbody receives your runoff discharges:

- Is your discharge mixing with the Facility's industrial stormwater discharge?
- Is it discharging to an industrial wastewater treatment system?
- Are there additional limitations placed on your discharges due to the permits associated with the industrial stormwater or wastewater streams?



Stormwater Pollution Prevention Plan

Common Plan of Development

- Depending on the Facility and where it is located, there is a chance that you will need a permit, even if under one acre.
- Sometimes the Facility includes more than would be anticipated.
- Ask questions of the engineers and verify everything. This is not a common situation and therefore it can be overlooked.



Sample Google Earth Image



Other Permits to be Considered

Spill Prevention, Control, and Countermeasure (SPCC) Plan:

- The Facility likely already has an SPCC Plan or a Facility Response Plan.
- Will your construction project sign onto the Facility's SPCC Plan, will you develop an SPCC Plan specific to your Project, or will it be some combination of the two?
- In the event of a spill or leak, at what point will the Facility personnel or your Client be notified?
- What role will the Facility or your Client play in the cleanup and disposal of the spill or leak?
- Who will be responsible for making agency notifications in the event of a reportable discharge?

Other Permits to be Considered

Dewatering and Hydrostatic Test Water Discharge Permitting:

- Must coordinate with the Facility, similar to the Construction General Permit.
- Are these activities already covered under existing Facility permits?
- Are you limited to where you are allowed to discharge?
- Are there more stringent requirements placed on the effluent due to existing permits?





Addressing the potential for soil contamination on-site.



Soil Contamination

What is the likelihood of contamination being present on your site?

- Depends on the previous use of the property and the length of time.
- Fuel storage/transfer facilities and maintenance/mechanics shops are notorious for contamination.
- Do you have a Phase II Environmental Site Assessment
- Not always the case if the construction is for the current landowner.

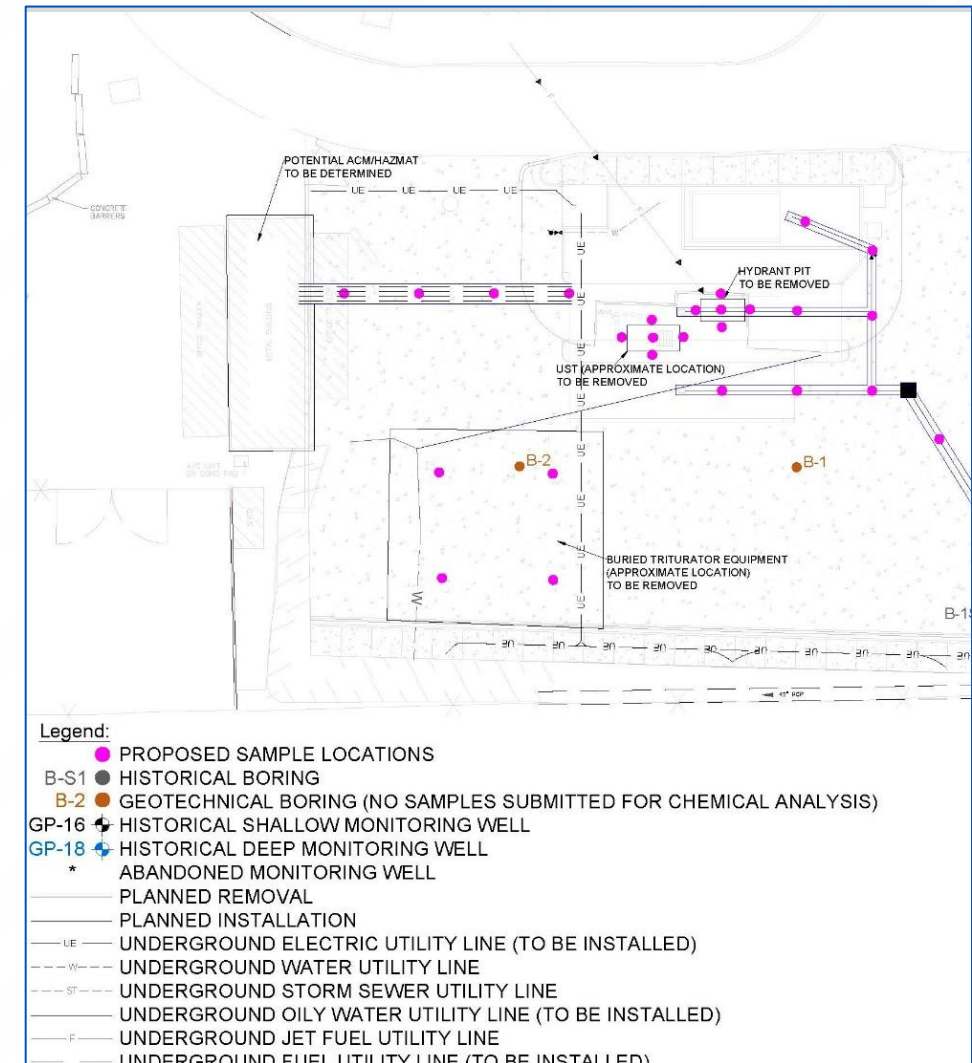


Soil Contamination

Soil Management and Sampling Plan (SMSP):

This should cover...

- Sampling of excavated soil for characterization
- Monitoring and segregation of excavated soils
- Segregation of contaminated soils and construction debris
- Management of the soil stockpile area
- Procedures for backfilling the excavation
- Management of groundwater and stormwater runoff from the excavation



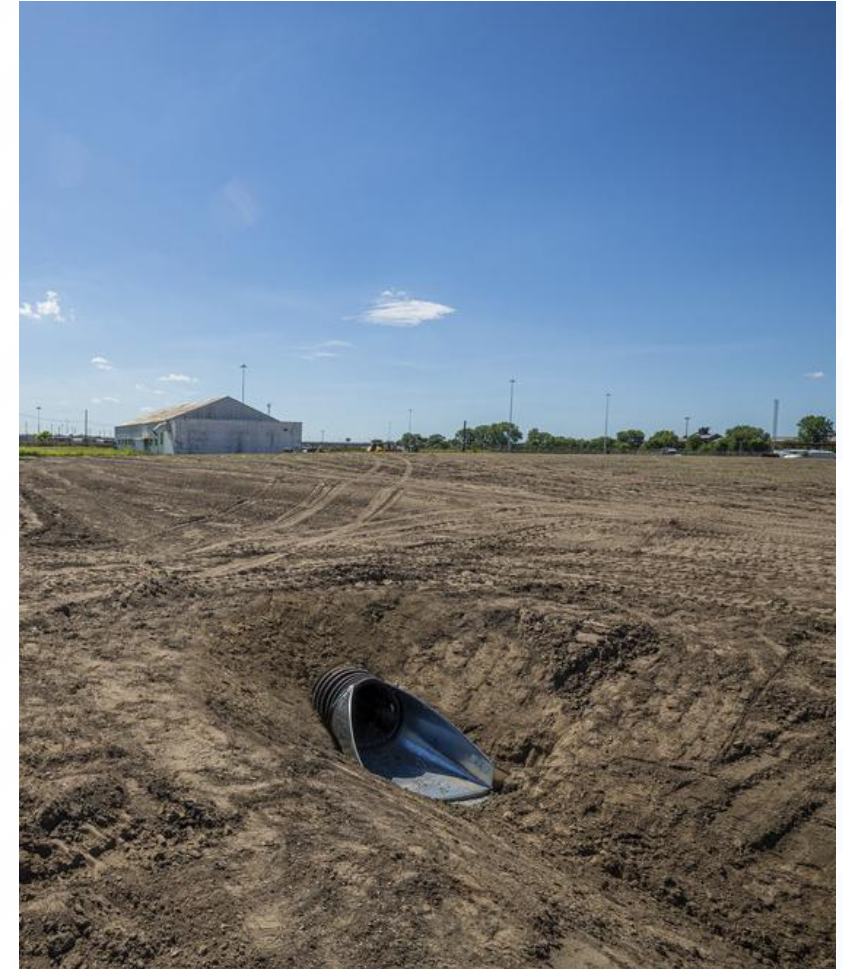
Soil Contamination

What if there is no Phase II?

Client is the historic owner of the Facility.

Discuss the potential for contamination with the Client. Ask...

- Where is contamination likely?
- What type of contamination may be present?
- Do they want the soil characterized? Do they have a SMSP?
- Do they want all excavated soil and construction debris to remain at the Facility?
- Expect the unexpected!





Material handling and waste management considerations associated with Tier II Facilities and RCRA Reporting.



Tier II Facilities and RCRA Reporting

What is a Tier II Reportable Facility?

Governed by Section 312 of the Emergency Planning and Community Right-to Know Act (EPCRA) and considered essential for tracking hazardous chemicals that can pose a risk to workers, the community, and the Environment.

A Facility that exceeds reporting levels of hazardous chemicals (i.e. gasoline or diesel storage) and/or extremely hazardous substances (EHS - i.e. ammonia, sulfuric acid)


- Hazardous substances (chemicals required by OSHA to have an SDS, but are not an EHS) 10,000 lbs.
- Extremely Hazardous Substances (EHS) -Threshold Planning Quantity (TPQ) or 500 lbs., whichever is less
- Some states have stricter reporting requirements than federal levels.



Tier II Facilities and RCRA Reporting

What is a Tier II Reporting?





- Mandatory reporting of types, amounts, and locations of any hazardous and toxic substances that are housed at the facility.
- Client will need to be notified of hazardous or toxic substances used on your project, since you are on their Facility.
- Client may request Safety Data Sheets (SDS) prior to any chemicals being brought onsite for review and approval.

CRC		SAFETY DATA SHEET	
1. Identification			
Product identifier	Brakleen® Brake Parts Cleaner		
Other means of identification			
Product code	05151		
Recommended use	Brake parts cleaner		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/Distributor information			
Manufactured or sold by:			
Company name	CRC Industries, Inc.		
Address	885 Louis Dr. Warminster, PA 18974 US		
Telephone			
General Information	215-674-4300		
Technical Assistance	800-521-3168		
Customer Service	800-272-4620		
24-Hour Emergency (CHEMTREC)	800-424-9300 (US) 703-527-3887 (International)		
Website	www.crcindustries.com		
2. Hazard(s) identification			
Physical hazards	Flammable aerosols	Category 1	
	Gases under pressure	Compressed gas	
Health hazards	Serious eye damage/eye irritation	Category 2	
	Reproductive toxicity (the unborn child)	Category 2	
	Specific target organ toxicity, single exposure	Category 3 narcotic effects	
	Specific target organ toxicity, repeated exposure	Category 2	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3	
OSHA defined hazards	Not classified		
Label elements			
			
Signal word	Danger		
Hazard statement	Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child. May cause damage to organs (liver, kidneys, brain, lungs) through prolonged or repeated exposure. Harmful to aquatic life.		
Precautionary statement			
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Do not apply while equipment is energized. Pressurized container. Do not pierce or burn, even after use. Extinguish all flames, pilot lights and heaters. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.		
Material name: Brakleen® Brake Parts Cleaner			
05151 Version #: 01 Issue date: 05-26-2015			
SDS US 1 / 10			

Tier II Facilities and RCRA Reporting

Does a chemical need to be reported on Tier II?

- Coordinate with the Client to determine if the chemical should be reported.
- Is it classified as Hazardous under OSHA 1910.
- Review the SDS; does the chemical have a statement that no chemicals are hazardous under OSHA 1910.

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Tier II Facilities and RCRA Reporting

RCRA Reporting and Hazardous Waste:

- The Resource Conservation and Recovery Act (RCRA) of 1976 was established to properly handle hazardous waste.
- RCRA defines a hazardous waste as having properties that make it dangerous or capable of having a harmful effect on human health and the environment.
- Ensures that hazardous waste is managed safely from “cradle to grave.”





Tier II Facilities and RCRA Reporting

RCRA Reporting and Hazardous Waste:

Hazardous Waste Generators are separated into three categories depending on the quantity of hazardous waste they generate per month.

- *Very Small Quantity Generator – 100 kg or less*
- *Small Quantity Generator – greater than 100 kg but less than 1,000 kg*
- *Large Quantity Generator – 1,000 kg or more*

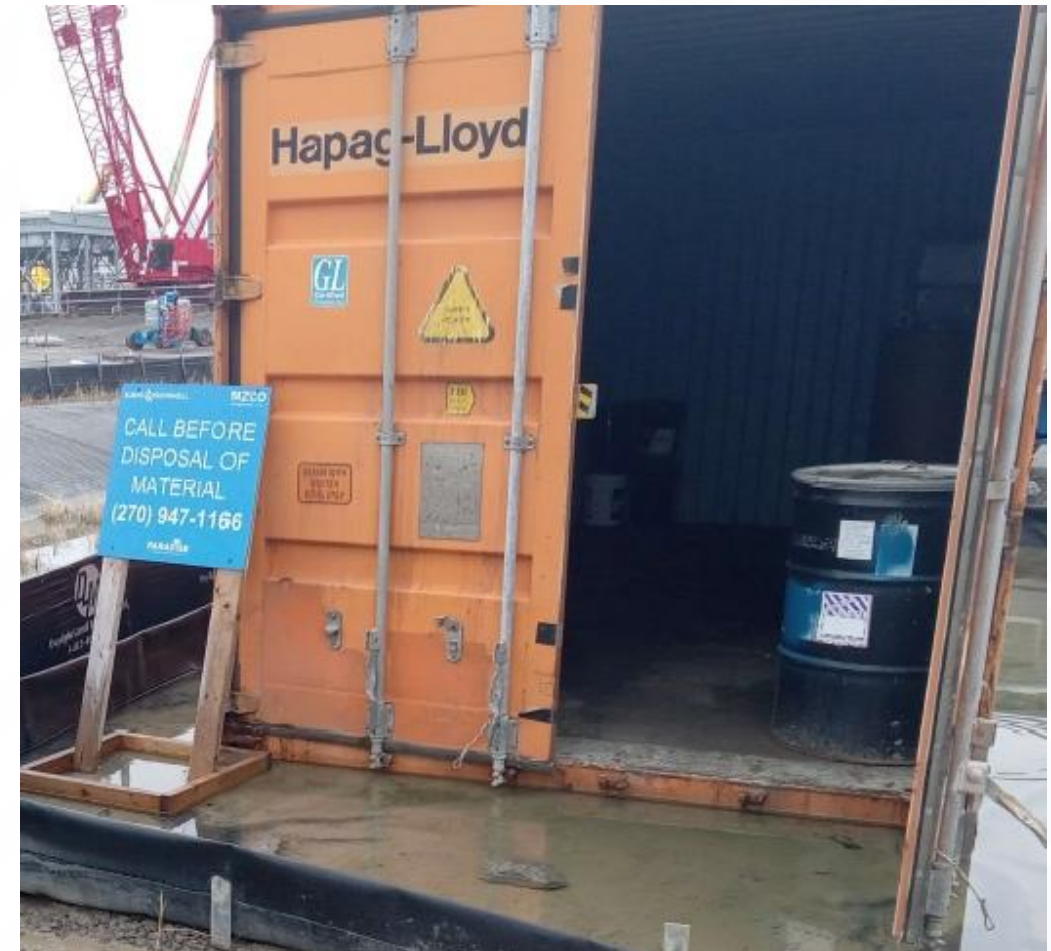
Generator classifications and requirements may vary by State

Depending on the category, the Facility will have different storage, containment, accumulation time frame, shipping, and reporting requirements.

Tier II Facilities and RCRA Reporting

RCRA Reporting and Hazardous Waste:

- Depending on the Project, you could affect the Facilities RCRA generator status.
- Hazardous and Universal Waste include such items as aerosol cans, oil-based paints, paint thinners, fluorescent light bulbs, part cleaners, etc.
- Client may require you set up a satellite collection site.
- Client may require weekly documentation identifying types of waste and quantities.





Disseminating the relevant
information to the contractors.



Disseminating Relevant Information to Contractors

Environmental Management Plan:

- Develop an Environmental Management Plan (also called Project Environmental Plan and Environmental Protection Plan) for the Project.
- Incorporates all environmental concerns into one document.
- Client coordination is a must to create an effective EMP.





Disseminating Relevant Information to Contractors

Environmental Management Plan:

- Overview of Project
- Outlines Project lines of communication
- Contains the Permit Matrix
- Natural and cultural resource information
- Pollutant management
- Required inspection
- Stormwater Control
- Document Storage and Distribution
- Appendices containing relevant maps and forms

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Client Name	TOC-1 Burns & McDonnell



Disseminating Relevant Information to Contractors

Project is not business as usual:

- Training and education must be conducted.
- All onsite contractors need to be part of the training.
- Environmental Awareness training during orientation should be conducted.
- Cover individual environmental topics during the morning tailgates.
- Follow up with refresher training as required.

Recap

- 1 Coordination with the Client is imperative to developing your SWPPP and ESC Plan.
- 2 You must understand how any existing permits will affect your permitting process.
- 3 Existing Facilities have a high probability of contaminated soil and therefore you must include how this potential contamination will be handled.
- 4 You need to verify if the Facility is a Tier II and/or RCRA Reporting site, and how that will affect your material handling and waste management streams.
- 5 Educate the contractors on the special requirements placed on the Project due to the existing permitting, soil contamination potential, and waste management requirements.



Questions?

Ken Gouvion, CPESC

Senior Environmental Scientist

kgouvion@burnsmcd.com

Phone: 469-949-8016

